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C/O CPA Global			MARANDI, JAMES R	
P.O. Box 52050				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/771,697

Applicant(s)

HIROSE, TOMONORI

Examiner

JAMES R. MARANDI

Art Unit

2421

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5,6,8-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,5,6,8-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to applicant's amendment filed on 7/22/2009. Claims 3, 5, 6, 8-13, and 15 are presently pending. Claims 1, 2, 4, 7, and 14 have been canceled

Response to Arguments

2. Applicant's arguments with respect to claims 9, 10, 13, and 15 have been considered but are moot in view of the new ground(s) of rejection.
 - 2.1. Although a new ground of rejection has been used to address additional limitations that have been added to claims 9, 10, 13, and 15, a response is considered necessary for several of applicant's arguments since Dureau reference will continue to be used to meet several claimed limitations.
 - 2.2. Applicant argues that ***"Dureau recites in paragraph [0008] that "Broadcast systems (e.g., interactive television systems) transmit information in a carousel format in order to allow receivers in the system to selectively obtain particular pieces of information in the carousel without requiring a return path from the receivers to the server. If a particular receiver needs a particular piece of***

information, it can simply wait until the next time that piece of information is broadcast, and then extract the information from the broadcast data stream."
(Underlining is added for emphasis) Dureau merely indicates that the receiver extracts the information the receiver needs from the broadcast data stream, but fails to recite the receiver extracts a plurality of data streams from the broadcast data stream. Therefore, Dureau's "extracting the information from the broadcast data stream" is different from the claimed "separat[ing] the received video stream into a plurality of video streams"." Page 8 of Remarks, 3rd paragraph

Examiner disagrees. The carousel format, cited by Dureau, in ¶ [8], applies to extraction of interactive data from the MPEG stream. As cited in ¶ [1], service providers may broadcast analog and/or digital programs such as video, audio, and or data (for interactivity). The data portion (for interactivity) may be delivered via VBI (for analog service), and Carousel (MPEG-2), as further described in ¶¶ [4] - [9]. Furthermore, as shown in Figs. 1 and 3, the proxy server 12 (or NG Receiver 340), receives multiple program streams via 42 from broadcast stations 16 (sources 14, and 15), and networks 17, separating and distributing the same through receivers 30 (1 -N); (In case of 340, the multiple programs are received from 360,362, and 371, and distributed to Television 357, receiver 352, etc.). The function of a receiver is to separate received programs (in case of MPEG-2, separating MPTS into SPTS and individual programs. Therefore, Dureau not only discloses extracting data from broadcast streams (for interactive programs), but also separating the various program streams as needed.

2.3. For claims 10, 13, and 15, applicant relies on the noted feature of claim 9 as presented and responded to above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5, 6, 9- 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over V. Dureau, USPGPUB 2003/0135860 (hereinafter "Dureau") in view of J.M.G. Iki et al., USPN 7,240,356 (hereinafter "Iki").

4.1. Regarding claim 9 Dureau discloses **a video selection server** (Fig 1., 12 Proxy receiver; and Fig 3, 340 next generation proxy receiver, serves content received from various sources destined for the local networks 50, or within the home, also ¶ [42]) **for selectively relaying video information, comprising:**

a receiving unit to receive a video stream containing a plurality of videos delivered via a first network (Fig. 1, networks connected via 138, 42, and 136) **and separate the received video stream into plurality of video streams corresponding to the respective videos** (as shown in Figs. 1 and 3, the proxy server 12 (or NG Receiver 340), receives multiple program streams via 42 from broadcast stations 16 (sources 14, and 15), and networks 17, separating and distributing the same through receivers 30 (1 –N); (In case of 340, the multiple programs are received from 360,362, and 371, and distributed to Television 357, receiver 352, etc.). The function of a receiver is to separate received programs (in case of MPEG-2, separating MPTS into SPTS and individual programs.);

an information analysis unit (Fig. 6) **to analyze the separated video streams** (at step 602 the received stream is analyzed and its format ascertained);

a decision unit (606, 610) **to determine whether or not a result of analysis by the information analysis unit fulfills a criterion related to a permitted image format indicated in a request from a client** (client format/ request is indicated at 604) **on a second network and to judge whether to permit delivery of the separated video stream received to a second network** (the second network is element 50 of Fig. 1, and network of devices 352 in Fig. 3. These devices register with 340 and 12 to indicate their capability, and 340 decides how to distribute/ transcode content from first network ¶¶ [13] and [42].

client format/ request is indicated at 604 is compared to the received stream to see if the request can be met, or should it be denied as in 616)); **and**

a transmitting unit, to transmit to the client, the separated video streams of which the delivery to the second network has been permitted by the decision unit.(Fig. 3, ¶¶ [33]-[37])

Dureau does not disclose:

Received video stream containing a plurality of videos of **different image qualities**;

an information analysis unit to analyze **image qualities** of the separated video streams and permit delivery based on **quality indicated**.

However, Iki discloses:

Receiving multiple video stream containing a plurality of different characteristics (see Abstract, Fig. 1, Fig. 4 (414)), whereby **different image qualities** is one of the characteristics considered (Col. 8, lines 23- 50, in particular line 47, and also quality of sounds as in lines 38-41);

an information analysis unit (as in Fig. 3, 304, 306, 316, 314) to analyze program version (**image qualities**) of the separated video streams and permit delivery based on version (**quality**) **indicated** (at 314).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Dureau with Iki's invention in order to check for and use an existing appropriate stream (already transcoded) to save processing time and cost at the receiver.

- 4.1.1. Regarding claim 3, the system of Dureau and Iki discloses **wherein the received video stream was multicast on the first network**; (Dureau: receivers 12, and 340 are a node on the first network, as described in ¶ [26], they may receive content via broadcast, multicast, or point to point (unicast)).
- 4.1.2. Regarding claim 5, the system of Dureau and Iki discloses **wherein the received video stream was unicast via the first network**; (Dureau: receivers 12, and 340 are a node on the first network, as described in ¶ [26], they may receive content via broadcast, multicast, or point to point (unicast)).
- 4.1.3. Regarding claim 6, the system of Dureau and Iki discloses **wherein the information analysis means analyzes a transmission protocol of the video stream**, (See Dureau ¶ [34]).

4.2. Regarding claim 10, Dureau discloses a **video delivery system for delivering a video stream** (Figs. 1 and 3), **comprising: an encoder to encode captured video to obtain a video stream containing a plurality of videos and deliver the video stream via a first network** (Fig. 1, content captured from multiple sources 13-15, at the first network, or from internet 371, and satellite network 360, 362, in Fig. 3, are encoded in variety of formats. ¶ [35] enumerates examples of such formats for the elements of Fig.3 which is an expanded version of Fig. 1); **and a video selection server** (Fig. 1, 12, further illustrated in Fig. 3, 340) **to receive the video stream delivered via the first network** (Fig. 1, networks connected via 138, 42, and 136), **separate the received video stream into plurality of video streams corresponding to respective videos** (as shown in Figs. 1 and 3, the proxy server 12 (or NG Receiver 340), receives multiple program streams via 42 from broadcast stations 16 (sources 14, and 15), and networks 17, separating and distributing the same through receivers 30 (1 –N); (In case of 340, the multiple programs are received from 360,362, and 371, and distributed to Television 357, receiver 352, etc.). The function of a receiver is to separate received programs (in case of MPEG-2, separating MPTS into SPTS and individual programs.), **analyze the separated video streams** (Fig. 6, at step 602 the received stream is analyzed and its format ascertained),

determine whether or not a result of the analysis fulfills a criterion related to a permitted format indicated in a request from a client (client format/request is indicated at 604) **on a second network , judge whether to permit delivery of the separated video streams to the client, and transmit, to the client the video streams of which the delivery to the client has been permitted,** (steps 606, 610; The second network is element 50 of Fig. 1, and network of devices 352 in Fig. 3. These devices register with 340 and 12 to indicate their capability, and 340 decides how to distribute/ transcode content from first network ¶¶ [13] and [42]. Client format/ request is indicated at 604 is compared to the received stream to see if the request can be met, or should it be denied as in 616. Also see Fig. 3, ¶¶ [33]-[37]).

Dureau does not disclose:

obtaining a video stream containing a plurality of videos of **different image qualities;**

an information analysis unit to analyze **image qualities** of the separated video streams and to permit delivery based on **quality indicated.**

However, Iki discloses:

Receiving multiple video stream containing a plurality of different characteristics (see Abstract, Fig. 1, Fig. 4 (414)), whereby **different image**

qualities is one of the characteristics considered (Col. 8, lines 23- 50, in particular line 47, and also quality of sounds as in lines 38-41);

an information analysis unit (as in Fig. 3, 304, 306, 316, 314) to analyze program version (**image qualities**) of the separated video streams and permit delivery based on version (**quality**) indicated (at 314).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Dureau with Iki's invention in order to check for and use an existing appropriate stream (already transcoded) to save processing time and cost at the receiver.

4.2.1. Regarding claim 11, the system of Dureau and Iki discloses **wherein the video selection server has a multi-stage configuration such that the video stream transmitted from a preceding-stage video selection server is delivered to a succeeding-stage video selection server**. As shown in Fig. 6 there are multiple stages of decision making which pass the received video stream from one stage to the succeeding stage. Furthermore, there are no limits on the number of application servers in the network as disclosed by Dureau. Servers can be distinct or co-located as any other electronic components of the network, also see ¶ [28].

4.2.2. Claim 12 is rejected as claim 11.

4.3. Regarding claim 13 Dureau discloses a **video selection method** (Fig 1., 12

Proxy receiver; and Fig 3, 340 next generation proxy receiver, serves content received from various sources destined for the local networks 50, or within the home, also ¶ [42]) **for selectively relaying video information, comprising:**

receiving a video stream containing a plurality of videos delivered via a first network (Fig. 1, networks connected via 138, 42, and 136);

separating the received video stream into plurality of video streams corresponding to the respective videos (as shown in Figs. 1 and 3, the proxy server 12 (or NG Receiver 340), receives multiple program streams via 42 from broadcast stations 16 (sources 14, and 15), and networks 17, separating and distributing the same through receivers 30 (1 –N); (In case of 340, the multiple programs are received from 360,362, and 371, and distributed to Television 357, receiver 352, etc.). The function of a receiver is to separate received programs (in case of MPEG-2, separating MPTS into SPTS and individual programs.);

analyzing (Fig. 6) **at least an encoding scheme of the separated video streams** (at step 602 the received stream is analyzed and its format/encoding scheme is ascertained);

determining (at 606, 610) whether or not a result of analysis fulfills a criterion related to a permitted image format indicated in a request from a client (client format/ request is indicated at 604) on a second network, to judge whether to permit delivery of the separated video stream to the client (the second network is element 50 of Fig. 1, and network of devices 352 in Fig. 3. These devices register with 340 and 12 to indicate their capability, and 340 decides how to distribute/ transcode content from first network ¶¶ [13] and [42]. client format/ request is indicated at 604 is compared to the received stream to see if the request can be met, or should it be denied as in 616)); and transmitting, to the client, the separated video streams of which the delivery to the second network has been permitted by the decision unit.(Fig. 3, ¶¶ [33]-[37])

Dureau does not disclose:

Receiving video stream containing a plurality of videos of different image qualities;

an information analysis unit to analyze image qualities of the separated video streams and permit delivery based on quality indicated.

However, Iki discloses:

Receiving multiple video stream containing a plurality of different characteristics (see Abstract, Fig. 1, Fig. 4 (414)), whereby different image

qualities is one of the characteristics considered (Col. 8, lines 23- 50, in particular line 47, and also quality of sounds as in lines 38-41);

an information analysis unit (as in Fig. 3, 304, 306, 316, 314) to analyze program version (**image qualities**) of the separated video streams and permit delivery based on version (**quality**) indicated (at 314).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Dureau with Iki's invention in order to check for and use an existing appropriate stream (already transcoded) to save processing time and cost at the receiver.

4.4. Regarding claim 15 Dureau discloses **a computer-readable recording medium recording a video selection program, which when executed by a computer, causes the computer to perform a method, the method comprising** (as shown in Fig 1., Proxy receiver 12; and Fig 3, 340 next generation proxy receiver):

receiving a video stream containing a plurality of videos delivered via a first network (Fig. 1, networks connected via 138, 42, and 136);

separating the received video stream into plurality of video streams corresponding to the respective videos (as shown in Figs. 1 and 3, the proxy server 12 (or NG Receiver 340), receives multiple program streams via 42 from

broadcast stations 16 (sources 14, and 15), and networks 17, separating and distributing the same through receivers 30 (1 –N); (In case of 340, the multiple programs are received from 360,362, and 371, and distributed to Television 357, receiver 352, etc.). The function of a receiver is to separate received programs (in case of MPEG-2, separating MPTS into SPTS and individual programs.);

analyzing (Fig. 6) **at least an encoding scheme of the separated video streams** (at step 602 the received stream is analyzed and its format/encoding scheme is ascertained);

determining (at 606, 610) **whether or not a result of analysis fulfills a criterion related to a permitted image format indicated in a request from a client** (client format/ request is indicated at 604) **on a second network, to judge whether to permit delivery of the separated video stream to the client** (the second network is element 50 of Fig. 1, and network of devices 352 in Fig. 3. These devices register with 340 and 12 to indicate their capability, and 340 decides how to distribute/ transcode content from first network ¶¶ [13] and [42]. client format/ request is indicated at 604 is compared to the received stream to see if the request can be met, or should it be denied as in 616)); **and**

transmitting, to the client, the separated video streams of which the delivery to the second network has been permitted by the decision unit.(Fig. 3, ¶¶ [33]-[37])

Dureau does not disclose:

Receiving video stream containing a plurality of videos of **different image qualities**;

an information analysis unit to analyze **image qualities** of the separated video streams and permit delivery based on **quality indicated**.

However, Iki discloses:

Receiving multiple video stream containing a plurality of different characteristics (see Abstract, Fig. 1, Fig. 4 (414)), whereby **different image qualities** is one of the characteristics considered (Col. 8, lines 23- 50, in particular line 47, and also quality of sounds as in lines 38-41);

an information analysis unit (as in Fig. 3, 304, 306, 316, 314) to analyze program version (**image qualities**) of the separated video streams and permit delivery based on version (**quality**) **indicated** (at 314).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Dureau with Iki's invention in order to check for and use an existing appropriate stream (already transcoded) to save processing time and cost at the receiver.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dureau, in view Iki, further in view of A. Tabatabai et al., USPGPUB 2003/0031260 (hereinafter "Tabatabai").

5.1. Regarding claim 8, the system of Dureau and Iki discloses **wherein the information analysis unit analyzes video content of the separated video streams** (such as Iki's Fig. 4, 412, where program content is described, Col. 8, lines 23- 51); **and the decision unit permits the delivery if the video contents of the separated video streams are previously set as deliverable content under the criterion** (such as Iki's Fig. 6, where the criteria for selection and delivery is set and tested at 316).

The system of Dureau and Iki does not disclose that the video content analysis is **based on scene description content of meta-data if the encoding scheme of the video stream is MPEG-7.**

However Tabatabai discloses analyzing and matching of video content and description data as it relates to MPEG-7 (¶ [17], Fig. 6, ¶ [48]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Dureau and Iki with Tabatabai's

teaching in order to take advantage of scene and content description for delivery of the most appropriate content to the viewer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. MARANDI whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dominic D Saltarelli/
Primary Examiner, Art Unit 2421

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